BRUHATH BANGALORE MAHANAGARA PALIKE

Name of the Agency	:	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of the Work	:	Improvements to Roads, Drains and Asphalting to roads in Vinayaka Layout 3rd Cross & 4th cross, 2nd Stage in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Estimate Cost	:	Rs.

QUALITY CONTROL REPORTS TO

Asst. Executive Engineer,
Kodigehalli Sub Division,
BBMP, Bangalore.

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NABL ACCREDITED LABORATOTY AS PER ISO / IEC – 17025:2005
No.23/14, 7th Cross, 3rd Stage, 4th Block, Shakthi Ganapathi Nagara,
Basaveshwaranagar, Bangalore – 560 079.

QUALITY CONTROL REPORTS FOR

WET MIX MACADAM (WMM)

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Job No.: CTCE/BBMP/W.No07/RSCN/WMM/Gradation/2014-15

28.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to roads in Vinayaka Layout 3rd Cross & 4th cross, 2nd Stage in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013

Date of Testing : 28.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **7410**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	130	130	1.8	98.2	95-100
22.4	2150	2280	30.8	69.2	60-80
11.2	1205	3485	47.0	53.0	40-60
4.75	1080	4565	61.6	38.4	25-40
2.36	985	5550	74.9	25.1	15-30
0.600	850	6400	86.4	13.6	8-22
0.075	650	7050	95.1	4.9	0-8

Note:

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28.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

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Agency : **Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.

Name of Work : Improvements to Roads, Drains and Asphalting to roads in Vinayaka Layout 3rd Cross & 4th cross, 2nd Stage in Ward No.07, Byatarayanapura, BBMP, Bangalore.

Reference : EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013

Date of Testing : 28.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8320**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	180	180	2.2	97.8	95-100
22.4	2510	2690	32.3	67.7	60-80
11.2	1280	3970	47.7	52.3	40-60
4.75	1150	5120	61.5	38.5	25-40
2.36	1095	6215	74.7	25.3	15-30
0.600	990	7205	86.6	13.4	8-22
0.075	865	8070	97.0	3.0	0-8

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28.05.2014

GRADATION FOR WMM

MORTH TABLE-400-11

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Reference : EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013

Date of Testing : 28.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **8300**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	285	285	3.4	96.6	95-100
22.4	2140	2425	29.2	70.8	60-80
11.2	1280	3705	44.6	55.4	40-60
4.75	1295	5000	60.2	39.8	25-40
2.36	1185	6185	74.5	25.5	15-30
0.600	925	7110	85.7	14.3	8-22
0.075	830	7940	95.7	4.3	0-8

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GRADATION FOR WMM

MORTH TABLE-400-11

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Reference : EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013

Date of Testing : 28.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **9065**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	285	285	3.1	96.9	95-100
22.4	2685	2970	32.8	67.2	60-80
11.2	1310	4280	47.2	52.8	40-60
4.75	1285	5565	61.4	38.6	25-40
2.36	1090	6655	73.4	26.6	15-30
0.600	1025	7680	84.7	15.3	8-22
0.075	835	8515	93.9	6.1	0-8

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Job No.: CTCE/BBMP/W.No07/RSCN/WMM/AIV/2014-15

28.05.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to roads in Vinayaka Layout 3rd Cross & 4th cross, 2nd Stage in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	28.05.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	389	390	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	87	88	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	302	302	
4	Aggregate Impact value = percent fines	22.37	22.56	
	100* (W_2/W_1)%			22.46

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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28.05.2014

Aggregate Impact Value

IS: 2386 Part IV

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of the Work	Improvements to Roads, Drains and Asphalting to roads in Vinayaka Layout 3rd Cross & 4th cross, 2nd Stage in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013
Source / Location	WMM Plant
Type of Mix	Wet Mix macadam
Date of Testing	28.05.2014

Sl No.	Details	Trial No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	380	378	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	78	79	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	302	299	
4	Aggregate Impact value = percent fines	20.53	20.90	
	100* (W_2/W_1)%			20.71

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%

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Job No.: CTCE/BBMP/W.No.07/MP/WMM/S-T/2014-15 28.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
Name of Work	Improvements to Roads, Drains and Asphalting to roads in Vinayaka Layout 3rd Cross & 4th cross, 2nd Stage in Ward No.07, Byatarayanapura, BBMP, Bangalore.
Reference	EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	28.05.2014

Civil-Tech Consultants & Engineers Bangalore

Result : Flakiness Index = **12.74%**

Elongation Index = **13.20%**

Result : Combined Flakiness & Elongation index 25.94%

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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Job No.: CTCE/BBMP/W.No.07/MP/WMM/S-T/2014-15 28.05.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Mr. Ramsingh Chandra Naik,** Contractor, Bangalore.
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Reference	EE/BTP/BBMP-E-PMT/156/2013-14 Dated: 09.10.2013
Technical Reference	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	28.05.2014

Civil-Tech Consultants & Engineers Bangalore

Result : Flakiness Index = **11.80%**

Elongation Index = **13.25%**

Result : Combined Flakiness & Elongation index **25.05%**

Comments:

Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

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